



Plan View
Scale - 1" = 20ft

Villa Maria VMAT4A Approval - Specification

Project: _____ **Luminaire:** _____ **Order:** _____
Qty: _____ **Type:** _____

Roof Module: A half-sphere spun aluminum roof adorned with a cast aluminum finish, mechanically assembled on the top section of the rig mechanism. The rig consists of a two-piece A300 aluminum hinge, allowing tool-free access to the interior of the luminaire.

Optical Module: The molded A304 aluminum heat sink is designed to minimize the temperature of the LEDs, increasing their longevity and efficiency. The optical module is mechanically assembled to the heat sink for easy replacement. The luminaire is without a lens or with a flat lens attached to a cast aluminum frame. The optical module is fully IP67 thanks to a molded silicone gasket. The high efficiency Orion LED optical engine is mechanically assembled on the heat sink. The lifetime of the LEDs is 100,000 hours. It is based on the LM-80 test and extrapolated with TM-21. This data is calculated when 50% of the LEDs produce 70% of their initial luminous flux (L70). The minimum color rendering index (CRI) is 70. The optical acrylic lens are designed to illuminate only where needed while achieving excellent uniformity with maximum spacing. The optical acrylic lens are sealed on the LED board. The light distribution type according to IES is _____ A white decorative plastic protection plate is mechanically assembled under the optical module.

Filter Module: Composed of 2 arms mechanically assembled to the pole top filter and the bottom section of the top ring mechanism, molded from A300 aluminum. The ring is filled with a watertight compression system. The arms are closed by mechanically assembled A300 aluminum wire cover plates. The pole-top filter is self-leveling and retained using set screws. It slip fits on a 4" (100mm) outside diameter x 9" (70mm) long post. Comes complete with street side adjuster.

Driver: Class 1 (P70 and P80) or Class 2 (P10 to P60) self-adjusting regulator.

Primary Voltage of _____ Volts, 50 / 60Hz, THD max 20%, High power factor of 90%. Operating temperature from -40°F (-40°C) to 130°F (55°C). The driver provides 0-10 Volts output and is ROHS compliant. Complete with an 18-AWG three-pole connector block and a 10A three-pole surge protector for Line-Ground, Line-Neutral and Neutral-Ground lines according to the IEEE / ANSI C82.41 2002 C standard.

Wiring / Hardware: Type TEW 14.7, 12" (30cm) minimum exceeding luminaire. All electrical connections between the modules are provided with quick-disconnect connectors for easy maintenance. All outside accessible hardware is stainless steel.

Color: _____ textured or smooth _____ finish. The application of durable polyester powder coating meets AAMA 2604 requirements (5 years at all weather conditions). The finish meets ASTM G7, B117, D1654 and D2247 standards for salt spray and moisture. Cyclone recommends a textured finish for this product. * Holograph colors are only available in Smooth (SM) finish.

MG: Marine grade pre-finish available as an option.

Warranty: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

EPA: 0.86 ft³ **Weight: 35 lbs / 16 kg**

Stamp/Approval: _____ Name: _____ Page 1 of 2
 Date: _____ Date: _____

Cyclone Lighting: 2175 Des Entreprises Blvd, Temecoma (CA) Canada J6Y 1Y9 www.cycloneighting.com CYL_VMAT4A Villa Maria Spec. 1621
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CBM1701C Clio Bollard Approval - Specification

Project: _____ **Luminaire:** _____ **Order:** _____
Qty: _____ **Type:** _____

Head Module: Two cast A306 aluminum arms mechanically secured to a molded ring designed to support the optical module. The head module is closed by a mechanically secured cast A306 round aluminum cap.

Base Module: Tube 5" (13cm) Ø, made of 6061-T6 aluminum alloy. The head module is mechanically secured with 4 anti-vandal type Allen screws. The assembly is mechanically fastened to the anchor plate with 4 anti-vandal type Allen screws.

Bolt Circle: Recommended installation at 3 1/2" (9cm) Ø. Available from 3 1/4" to 3 1/2" (8cm to 9cm) Ø.

Anchor Bolts: Supplied by Cyclone: 3/8" (9mm) Ø x 12" (305cm) (H-3), 4 galvanized anchor bolts, 8 nuts and 8 washers for leveling.

Optical Module: The cast A306 aluminum heat sink is optimized to minimize the temperature of the LEDs, increasing their longevity and efficiency. The optical module is mechanically assembled for easy replacement. A flat lens is attached to a cast aluminum frame. The optics is fully IP68 thanks to the EPDM gasket. The high efficiency Orion LED is mechanically assembled on the heat sink. The lifetime of the LEDs is 100,000 hours. It is based on the LM-80 test and extrapolated with TM-21. This data is calculated when 50% of the LEDs produce 70% of their initial luminous flux (L70). The minimum color rendering index (CRI) is 70. The lenses are made of acrylic and designed to illuminate only where needed while achieving excellent uniformity with maximum spacing. Produces 0% spill. The light distribution type according to IES is _____

Driver: Class 2 (P10 to P40) self-adjusting regulator.

Primary Voltage of _____ Volts, 50 / 60Hz, THD max 20%, High power factor of 90%. Operating temperature from -40°F (-40°C) to 130°F (55°C). The driver provides 0-10 Volts output (DIM option) and is ROHS compliant. Complete with an 18-AWG three-pole connector block and a 10A three-pole surge protector for Line-Ground, Line-Neutral and Neutral-Ground lines according to the IEEE / ANSI C82.41 2002 C standard.

Wiring / Hardware: Type TEW 14.7, 12" (30 cm) minimum exceeding luminaire. All electrical connections between the modules are provided with quick-disconnect connectors for easy maintenance. All outside accessible hardware is stainless steel.

Color: _____ textured or smooth _____ finish. The application of durable polyester powder coating meets AAMA 2604 requirements (5 years at all weather conditions). The finish meets ASTM G7, B117, D1654 and D2247 standards for salt spray and moisture. Cyclone recommends a textured finish for this product.

MG: Marine grade pre-finish available as an option.

Warranty: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Anchor Plate
 180°
 270°
 90°
 30°
 15°

CBM1701C Clio

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Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lumens Per Lamp	Light Loss Factor	Total Lumens	Wattage	Distribution
□	B	12	Cyclone Lighting	CBM1701C-FGF-T5-P40-3K	CBM1701C	1754	0.9	1754	42	Type 5
△	P	11	Cyclone	VMAT4A-FGF-3MHS-P30-30K	Villamaria	3180	0.9	3180	43.8	Type III, Medium

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Main Court Yard	+	0.37 fc	10.65 fc	0.01 fc	1065.0:1	37.0:1
Parking AFG	+	0.5 fc	2.6 fc	0.0 fc	N/A	N/A
Property Line	X	0.0 fc	0.0 fc	0.0 fc	N/A	N/A

General Notes - Exteriors

- Readings shown are based on a total LUF of as shown at grade. Data references the extrapolated performance projections in a 25c ambient based on 10,000 hrs of LED testing (per IESNA LM-80-08 and projected per IESNA TM-21-11).
- Please refer to the fixture labels for product type and mounting height.
- Product information can be obtained at <https://www.acuitybrands.com/> or through your local agency.

SAFETY - General Parking Applications (Less than 0.2fc min)

Please note this analysis does not comply with IESNA RP-8-21 levels for parking and pedestrian safety. Acuity Brands will not be liable for any safety issues that may arise from the installation of this design. An alternate design can be provided if requested through your Acuity agent.

DISCLAIMER

This application design is not a professional engineering drawing, and the design, including reported data and calculated results, is provided for informational purposes only, without any warranty as to accuracy, completeness, safety or otherwise. The design is the result of calculations made using Visual® lighting application software, photometric/radiometric data measured in a laboratory, and certain computational and modeling assumptions. Far-field photometric/radiometric data may have been used to perform one or more calculations. Photometric/radiometric data is typically collected under far-field measurement conditions; far-field data is not generally representative of near-field geometric conditions. When using far-field photometric/radiometric data, the Visual software applies certain generalizing assumptions to approximate near-field performance. These approximations may result in significant inaccuracies in individual calculated luminous and/or radiant power quantities in areas where a source is in close proximity to a particular surface or point.

The modeling of radiant flux exchange used in the Visual software requires a uniform surface exitance condition by adaptively subdividing surfaces with non-uniform exitance into subsurfaces with sufficiently uniform exitance gradients. Practical restrictions, due to computer hardware limitations, may prevent the subdivision procedure from subdividing surfaces with high exitance gradients into subsurfaces with sufficiently uniform exitance gradients, introducing potential discretization error into calculated values.

Calculations performed by the Visual software assume that all reflected flux is reflected in a perfectly diffuse (Lambertian) and spectrally uniform manner across the spectral range being analyzed. If actual reflectance characteristics differ from these assumptions, observed luminous and/or radiant power quantities may differ from predicted quantities.

As a result of the computational limitations and simplifying modeling assumptions described above, and/or variations in actual product performance from tested product samples, the accuracy of calculated output values including expected radiometric quantities and any resulting derived radiation dose calculations may be adversely affected.

In addition, the accuracy of the application design may be adversely affected if information about the physical space provided by Cyclone Brands Lighting is incomplete, inaccurate, outdated or not in the required format (including but not limited to floor plans, space layout, reflected ceiling plans, physical structures, electrical design or specifications), if incorrect assumptions are made because of such deficiencies in the information provided, or if typical assumptions made about the depicted physical space are not appropriate for the space. Furthermore, actual field performance may differ from performance calculated using laboratory measurements as the result of miscalculations related to deficiencies in the information provided about the physical space, degradation factors in the end-user environment (including, but not limited to, voltage variation and dirt accumulation), or other possible variations in field conditions. Finally, lamp lumen depreciation and/or depreciation in lamp radiant intensity may result in performance over time that differs from performance calculated using a new lamp. Light loss factors may have been used in the application design to estimate such depreciation, but flaws in these estimates may also result in performance over time that differs from calculated performance.

It is the obligation of the end-user to consult with appropriately qualified Professional Engineer(s) to determine whether this application design meets the applicable requirements for performance, code compliance, safety, suitability and effectiveness for use in a particular application. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this application design.